YOZGAT BOZOK UNIVERSITY FACULTY OF ARTS AND SCIENCES

CHEMISTRY DEPARTMENT COURSE PLAN

Course Code	Course Title	Semester	Course Type (C/E)	T+A+L (Time/Week)	Credit	ECTS	Course Language
KİM482	Biochemistry Laboratory -II	Spring	C	0+4+4	4	4	English

COURSE INFORMATION

Course Catalog Description (Content)	
The Aim of the Course	Making qualitative and quantitative determinations for the application of the information given in biochemistry courses
Course Level	Lisans
Course Language	English
Teaching method	(X) Formal ( ) Online ( ) Mixed/Hybrid
Teaching Staff of the Course	Prof. Dr. Mustafa SAÇMACI Prof. Dr. Ş.Hakan ÜNGÖREN Prof. Dr. İrfan KOCA Asst. Prof. İbrahim Evren KIBRIZ
Prerequisite Course(s) of the Course	-
Learning Outcomes from the Course	-Gains knowledge about laboratory safety. - Gains the ability to purify, analyze and interpret different proteins in foods. - Gains the ability to analyze and interpret enzyme activity. - Gains knowledge about urine determination methods. - Learns the determination of blood groups

COURSE CONTENT

Week	Theory	Practice/Laboratory
1		Experiment to identify cholesterol in the brain with the Salkowski method
2		DETERMINATION OF HEMOGLOBIN IN THE BLOOD
3		Identifying proteins with the biuret test
4		Extraction of casein from milk
5		Bradford Protein Analysis
6		SEPARATION OF GLOBULINS AND ALBUMINS IN SERUM BY PRECIPITATING WITH AMMONIUM SULFATE
7		Osazon Formation and Determination of Sugars
8		Protein Analysis
9		Lipid Analysis
10		Isolation and Determination of Vitamins
11		Enzyme Activity Analyzes
12		Urine Analysis

13		Determination of Blood Groups
14		General Review and Report presentation
15	Final Exam	

Course Learning Resources

1. Champe PC, Harvey RA, Ferrier DR (2010). Biochemistry (Lippincott's Illustrated Reviews Series). Lippincott Williams & Wilkins.
2. Sözbilir NB, Bayşu N. (2008). Biyokimya. Öncü Basımevi, Ankara

ASSESSMENT CRITERIA

Work Activities During the Semester	Number	Contribution
Homework	1	%30
Practice		
Forum/ Discussion Application		
Short Exam (Quiz)	2	%35
Ratio Of Semester Studies To Semester Success (%)		%40
Ratio of Final to Success (%)		%60
Total		%100

COURSE WORKLOAD TABLE

Activity	Total Weeks	Duration (Weekly Hours)	Total Workload
Theory			
Practice	14	4	56
Forum/ Discussion Application			
Reading	4	4	16
Internet Scanning, Library Study			
Material Design, Application			
Report Preparation	14	1	14
Presentation Preparation			
Presentation			
Final Exam	1	2	2
Preparation for the Final Exam	4	3	12
Other(s) (Specify: … …. ……..)			
Total Workload			
Total Workload / 25 (s)			100/25
ECTS Credits of the Course			$100/25 \cong 4$
Note: The workload of the course will be determined by the instructor on a per-course basis.			

PROGRAM LEARNING OUTPUTS CONTRIBUTION LEVELS

No	Program Learning Outputs	1	2	3	4	5
1	Gains extensive knowledge about the basic chemical properties of matter and uses this knowledge in daily life, industrial scale, and practical chemistry and shares them with the society.					**X**

2	Performs experiments, collects data, interprets, evaluates results, defines problems parallel to current technological developments, produces solutions against problems encountered in the laboratory.					**X**
3	Calculates and processes chemical information and data.			**X**		
4	Applies her/his knowledge and understanding of chemistry to the solution of unconventional qualitative and quantitative problems.				**X**	
5	Defines and comprehends chemical concepts and theories in Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Analytical Chemistry, Biochemistry.					**X**
6	Can conduct research in the light of scientific data on any subject in the field of chemistry.				**X**	
7	Writes, presents, discusses scientific material, and presents it orally to a knowledgeable audience.			**X**		
8	Brings a chemical approach to the solution of environmental problems, makes environmental analyzes and reports.		**X**			
9	Knows a foreign language at a level to read and understand the basic terms and processes of the chemist profession.			**X**		
10	Can use computer software and information and communication technologies at the level required by the field.		**X**			
11	Adapts and transfers the knowledge gained in the field to secondary education.			**X**		
12	Apart from the field of chemistry, she/he gains knowledge in different branches of science that she feels close to.		**X**			
13	Carries out a study independently, makes group work and gains the awareness of taking responsibility.					**X**
14	They can develop a positive attitude towards lifelong learning and constantly renew their professional knowledge and skills.			**X**		
15	Have sufficient awareness of the universality of social rights, social justice, quality culture and protection of cultural values, environmental protection, occupational health and safety.		**X**			